

A Site Manager's guide to...

New water mains and service connections on new developments



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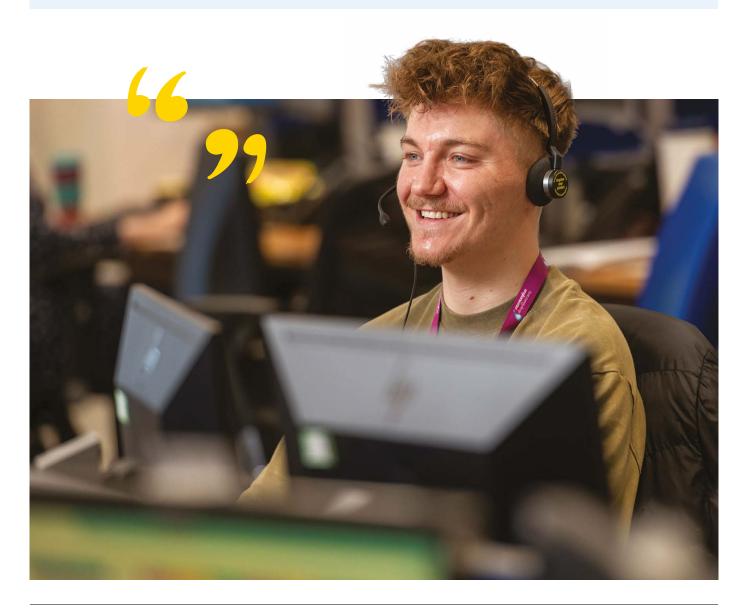
Contact details for your development

You will have specific members of the Mains Engineering team assigned to your scheme to guide you through your journey. The details of your contacts will be given to you once we have processed your application and when confirmation that construction is going ahead.

Connections Team (plot connections)

If you have any queries regarding service connections please contact our Connections Team on **0345 60 66 087**, **option 1**.

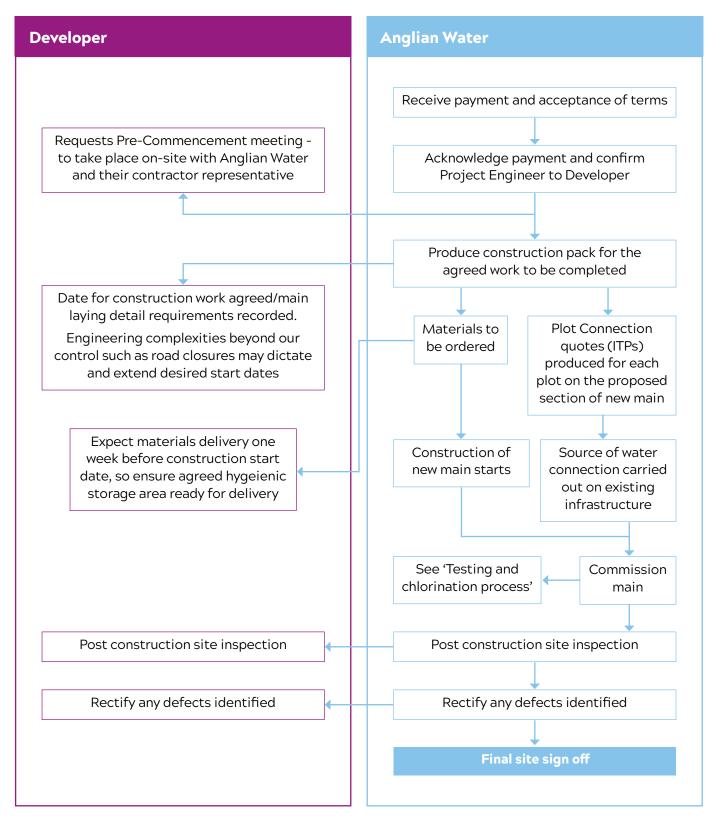
Anglian Water Services Limited, Developer Services, PO Box 495, Huntingdon, PE29 6YY Email connections@anglianwater.co.uk or visit anglianwater.co.uk





Water main construction process





Pre-Commencement meeting

Before any construction of the new water main commences, the Developer contacts Anglian Water (or in some cases Anglian Water may contact the Developer) to arrange a Pre-Comm (Pre-Commencement) site meeting. The Pre-Comm can be arranged once we have received acceptance of our Terms and any payments required. This meeting will be attended by Anglian Water, a representative from the Developer and a representative from Anglian Water's construction partners. At the pre-commencement meeting the following will be agreed:

- · A commencement date to start the mains construction.
- · The line and levels available by the construction start date.
- · A designated hygienic area for the storage of pipes and fittings so that a delivery can be arranged.
- Exchange of relevant health and safety and CDM information (ideally a CPP from your Principal Contractor)
- The lengths of main(s) to be constructed.
- The plot numbering and layout hasn't changed or been amended compared to the original/current design drawing.
- Location, including line and level of any other utilities services in the vicinity of the new water mains or services to be declared (following NJUG Guidelines on the Positioning of Underground Utilities' Apparatus).
- · Any other site specific hazards or relevant information.

Important note: If, when Anglian Water's construction partners arrive on site, the lengths of mains to be constructed, as agreed at the Pre-Comm cannot be completed, a charge for the remobilisation of our construction partners and the cost of the additional connections will be levied. If we are unable to start work for reasons within the Developer's control we reserve the right to leave site and re-programme the works.



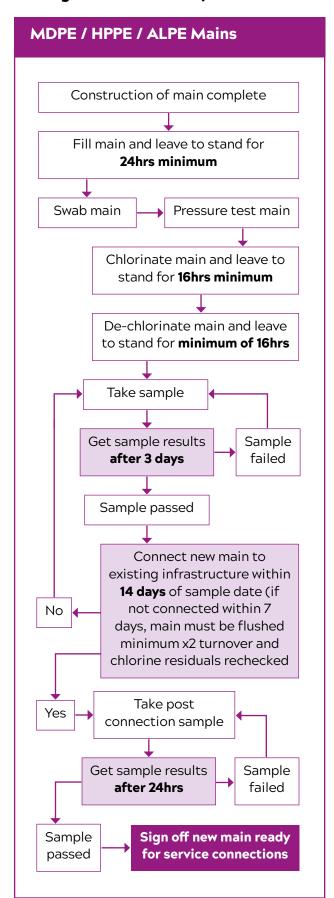
Site preparation and commencement of main laying

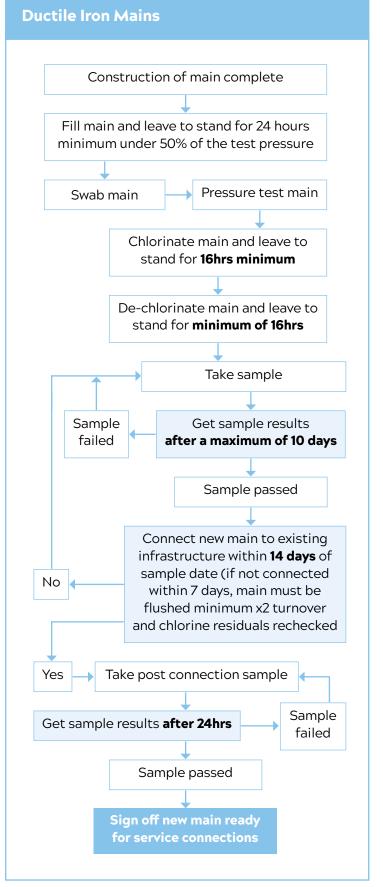
Before construction of the new main commences, it is important that the kerb lines are marked out and that our construction partners are advised on the final finish level. The line of the new water main should be clear of all building materials, scaffold, skips, plant, etc.

Anglian Water employees and their construction partners will require your site induction before their work can commence. Any standing time incurred as a result of waiting for an induction may be recharged to the Developer. Anglian Water and its Partners team will follow your site specific 'signing in' requirement whilst on site.



Testing and chlorination process







Where possible, water mains will be constructed with a minimum cover of 750mm from the top/ crown of the main or 900mm in verge or unmade ground. When in a footpath or footway, the centre of the main should be 690mm from the kerb face (as per NJUG guidelines).

Anglian Water aims for a timescale of **12 weeks** from the Pre-Commencement meeting date to the commissioning of the new water main, and it being ready for service connections.



Post construction sign off

Once the new water main is commissioned or the site construction has been completed, Anglian Water representatives will walk the line of the new main to ensure that:

- · All fittings have been installed as per the design drawing.
- · All fittings are in chambers set to finish levels given.
- The correct cover and frame is fitted to represent the fitting beneath.
- · The correct marker posts are installed when possible.

Any defects identified at this point will need agreeing with who is responsible for the rectification actions between the site and Anglian Water. Any damage to the main or mains fittings will be recharged to the Developer.

Hydrant use

Use of any hydrant

Unauthorised use of a hydrant is an offence under <u>Section 174 of the Water Industry Act 1991</u>. In order to avoid the risk of legal proceedings, please contact **Aquam Water Services Ltd** on **0844 836 0045** or by email: **anglianwater@aquamcorp.co.uk** to hire a metered standpipe and gain authorisation to use a hydrant as a water supply.

Interference with any hydrant can result in:

- · Contamination of the water network.
- · Discolouration of the water network.
- · Burst mains due to pressure surges and transients.
- · Reduction in pressure of the water network.
- · Interruption to the supply to surrounding properties.

Hydrants should also not be used for temporary building water supplies without agreement.

Fire hydrants in a new water network

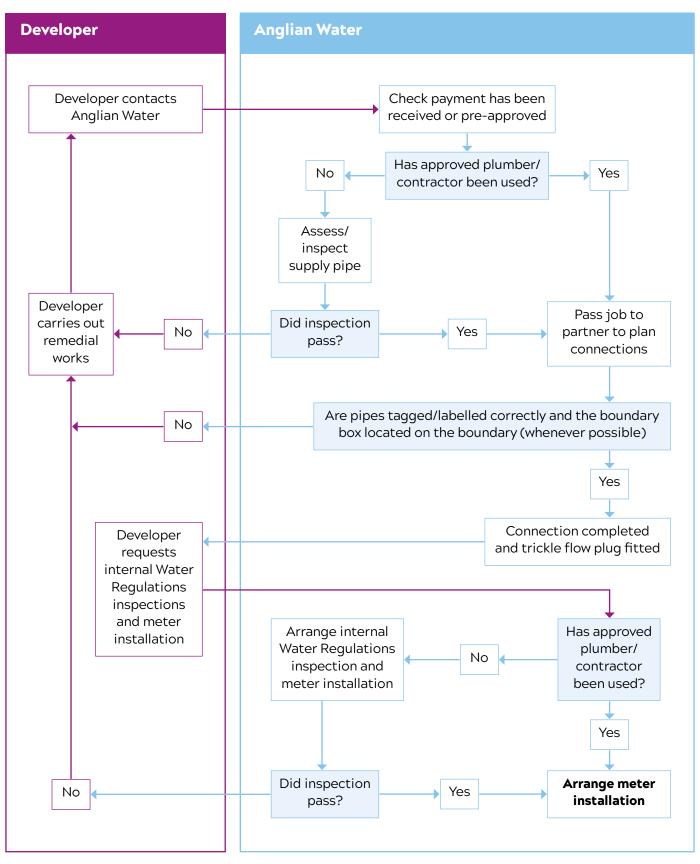
Anglian Water will liaise with the local Fire Authority regarding the provision of fire hydrants, and will install any new fire hydrants where requested by that Fire Authority.

Please remember that fire hydrants are life saving devices; it is therefore important that once the new water main is commissioned you ensure that:

- Site access is made available to fire service personnel so that the new fire hydrants can be inspected and adopted by the Fire Authority.
- The position of new fire hydrants are kept free and not covered or obstructed by building materials etc, so that they are accessible in the event of a fire during the construction of your development.
- When constructing footpaths and other final surfaces, you ensure that the correct fire hydrant chamber cover is installed, the fire hydrant marker post is in position, and the fire hydrant cover is finished at surface level and never buried.
- · Fire hydrant chambers are free of debris.

Service connections





Specification for underground services

It is the Developer's responsibility to lay the supply pipe section of the service pipe from the internal stop tap to the property boundary. The supply pipe and it's fittings must comply with <u>Water Supply (Water Fittings) Regulations 1999</u>.

Supply pipes must be a minimum of 750mm deep and ducted where they rise and enter the building. Also, the internal stop tap must be installed and the end of the pipe (the tail pipe at the property boundary) shall be sealed with a cap, whilst it lays in situ prior to being connected to the live network. Service pipes are to be bedded and covered in sand prior to trenches being backfilled.

If the water main is on the far side of the carriageway, the supply pipe is still required to be laid to the property boundary, but with an additional duct (one per supply pipe) installed underneath the carriageway, inline with the new supply pipe. The ends of the duct shall be exposed in readiness for the future connection.

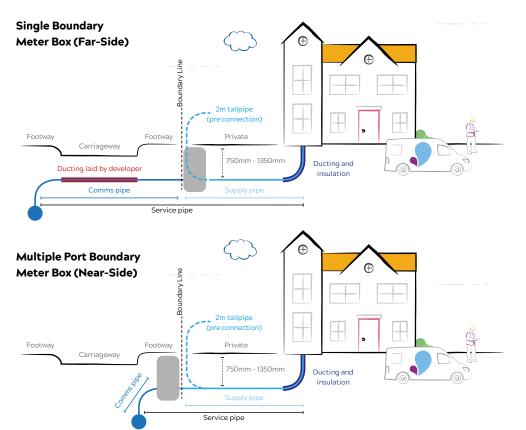
Ducting sizes Pipe Diameter D	Oucting Diameter
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25mm 50mm 50/63mm 100mm 90mm 150mm

Read our full boundary box guidelines <u>here.</u>

Position and installation of boundary boxes

Highway Authorities will not allow boundary meter boxes in driveways or crossovers where vehicles are likely to drive over them. Chambers serving individual plots will be positioned just inside the boundary point, however multi plot manifolds will still be placed in what will be the public highway.



An appropriate location should be considered when installing supply pipes. If the chambers are positioned in a location which the Highway Authority do not deem acceptable, this can result in them refusing to adopt the road/footpath until they are repositioned. This work would be carried out at the Developer's cost.

An alternative is available where the Developer can purchase and install the boundary box within the curtilage of the property, at the same time as they lay the supply pipe.

Installing wall boxes

Anglian Water accepts the specification of both 'Groundbreaker' and 'Intex' wall boxes. If a wall box is the preferred method of connection, it is the Developer's responsibility to purchase and install the wall box prior to requesting the service connection.

When you have requested and paid for the connections, it is your responsibility to excavate to the warning tape above the water main for a near-side connection or install a duct underneath the carriageway for a far-side connection, before Anglian Water's contract partners carry out the connection. When making a connection to a wall box supply pipe, Anglian Water will not install a controlling valve at the property boundary, as there is already one built into the wall box.

Anglian Water will be responsible for maintaining the wall box, but the pipework from the wall box to the internal stop-tap remains the responsibility of the Developer/Occupier.

For details of Groundbreaker wall boxes visit: **groundbreaker.co.uk**

For details of Intex wall boxes visit: talis-uk.com





Important note: If wall boxes are fitted it is important they are positioned before any lockable gate or other access restriction, especially if to be positioned at the rear of properties. Our meter reader will need access to the wall box at any time.



Water Regulations and approved plumbers/contractors

All external service pipes and internal plumbing must comply with the <u>Water Supply (Water Fittings) Regulations 1999</u>. If Anglian Water approved plumbers or approved sectored contractors are not used, Anglian Water may carry out Water Regulations inspections.

Anglian Water approved plumbers

If Anglian Water approved plumbers are used on your new property they should issue you with a Water Regulations Compliance Certificate for every new property. Where such a Certificate is not obtained, Anglian Water reserves the right to carry out an inspection.

Anglian Water approved sectored contractors

Sectored contractors can also issue a Compliance Certificate. They do not need to hold a formal plumbing qualification but they will be required to pass the Anglian Water assessment test based on the Water Supply (Water Fittings) Regulations 1999. The sectored contractor may specialise in the following areas: underground installations and/or site manager/agent. If you would like more details on Water Regulations or the approved plumber/contractor scheme, please contact our Water Regulations Team on **0345 60 66 087** or visit our website <u>anglianwater.co.uk</u>

Location of water service stop valves and meters within blocks of flats or apartments

Blocks of flats and apartment dwellings all require separate metered water supplies. When designing/ installing these individual supplies, each requires an independent stop valve which needs to be accessible at all time from a communal area of the building (ability to isolate any supply in the event of a water leak from an unoccupied property). All pipework must not pass through any flat or apartment dwelling other than the one it is serving.

The mains water supply pipework in blocks of flats or apartments must be located either in communal areas of the building or in purpose made service ducts. The pipework must not pass through flats, and all mains water supplies must be accessible at all times.

Pipework must be installed in compliance with schedule 2, paragraph 10 of the Water Supply (Water Fittings) Regulations 1999. Please contact our Water Regulations Team on **0345 60 66 087**, option **3**, then option **3** or email waterregulations@anglianwater.co.uk if you would like further advice in this area. If external water meters are not possible for each flat, Anglian Water will allow internal meters. If internal meters are installed, the Developer will install a metallic manifold to house the meters.

The meter manifolds must be located in an area of common access, i.e. a meter cupboard, enclosure or plant room.

Water services in contaminated ground

Contaminated ground If the site has been deemed as contaminated, the service pipes installed by the Developer must be a barrier pipe system or plastic coated underground copper to BS EN 1057:1996 standard. Wall boxes are suitable for use on contaminated sites, however boundary boxes are the preferred meter housing option. If boundary boxes to be used, Anglian Water will install a contaminated land boundary box.

For further information please see the 'Contaminated Land' on our website anglianwater.co.uk/developers

Manifold Connections

If any of the service connections on site are to be made using 2, 4 or 6 port manifolds, the service connections for all the properties coming from a multi-port manifold must be requested to be connected at the same time and they must **all** be ready to be connected in one visit.

Temporary Building Supplies (TBS)

Temporary building supplies can either;

- Be a connection from our existing water network, via an application in InFlow (New Water Connection application).
- Be a connection from any new commissioned main within your site boundary (email your Development Services Engineering with a map showing the preferred location and a brief description of your need).

Please note an appointed retailer will be required for all TBS supplies. Visit the Open Water website for further details <u>open-water.org.uk</u> A TBS can be used for all construction purposes including site welfare facilities. All welfare facilities must comply with the Water Supply (Water Fittings) Regulations 1999.



Requesting your service connections

When contacting Anglian Water to request your service connections, please ensure:

- · Payment for the services have been made if your company does not have a DART account.
- · Your supply pipe from the property to the boundary is in place and complies with the specification above and the Water Supply (Water Fittings) Regulations 1999. Each supply pipe is clearly marked as to which property it supplies, and the end of the tail pipe sealed to avoid contamination.
- The area of the connection is free from obstacles, such as skips, scaffold and building materials.
- The pipe inside the building has a WRAS approved stop tap fitted.
- Where the connection is on the opposite side of the carriageway, the ends of the ducts are exposed and marked.
- · The finished kerb line and levels are known.
- Boundary boxes will not be in driveways or vehicle cross over (see our Boundary Box Guidelines leaflet for further help).
- Where high risk installation, i.e. rainwater harvesting or greywater systems are being installed, the connection will not be made until the installation has been given water regulations consent by Anglian Water.

You will need the Anglian Water job number(s) for the connection(s) you are requesting. You can request service connections by emailing: **connections@anglianwater.co.uk** or by calling our New Connections Team on **0345 60 66 087 then option 1**.

Important note: Standard domestic connections will be installed with a trickle flow plug at the time of connection. The trickle flow plug will give adequate flow and pressure for the testing of the internal plumbing system, but will not be adequate to supply an occupied property. The water meter will be installed at the same time as the internal water regulations inspection takes place to ensure compliance with the Water Supply (Water Fittings) Regulations 1999. Therefore it is important that the property is fully plumbed when requesting the meter installation.



For information on non-standard domestic connections, please contact the Water Regulations Team on **0345 60 66 087**, **option 3**, **then option 3** or email **waterregulations@anglianwater.co.uk**.

When you are ready for the internal water regulations inspection and meter installation, please contact us on **0800 137 631** 9am to 5pm Monday to Friday, quoting the Anglian Water job numbers. Please allow 5 working days for the meter to be installed from the date requested. At the time of the meter being installed, Anglian Water will record an accurate meter location as well as confirming the postal address, any occupancy date and occupier if known. This will ensure accurate billing of our new customers.

It is a criminal offence for Developers or their contractors to tamper with the yellow trickle flow plug in any way.

Our levels of service

Our levels of service for making water connections are detailed in the table below.

Chlorination of supply pipes

If any of your supply pipe(s) are over 100 meters in length and/or greater than 63mm in diameter (does not apply to 25mm diameter pipe), they must be pressure tested, chlorinated and sampled before connection (samples must be analysed by a UKAS accredited laboratory). A list of companies that can carry out pipe chlorination and testing can be found on the Developer Services pages of our website anglianwater.co.uk. It is the Developer's responsibility to organise the overall testing of their new pipe. Please liaise with our Connections Team when doing this by calling **0345 60 66 087**, **option 1**.

Post connection damage

Any damage caused to Anglian Water's boundary boxes after they have been installed and connected will be repaired or replaced by Anglian Water, and the full cost of the work will then be recovered from the Developer. Please ensure when final surfacing is carried out, all boundary boxes are adjusted to the correct level and must never be buried.

Our levels of service		
No traffic restrictions or on a development site	Up to 21 working days	
	If 3 or 4 way traffic lights required up to 50 days	
Traffic restrictions	If the road is classed as traffic sensitive up to 90 days	
	If a road closure is required up to 90 days	
Access notices to enter private third party land	If our main is in private land owned by a third party, we are required to serve legal notices, this can take between 90-130 days	
Service pipe requires chlorination (see above)	If either the Developer or Anglian Water sections of the service pipe requires chlorination, additional time will need to be allowed.	

Water reuse systems, rainwater harvesting and greywater systems

All water reuse systems are considered by Anglian Water to be high risk. They contain water which is considered to be a fluid category 5 risk water, which represents a serious health hazard. Should you be intending to install either rainwater harvesting or greywater systems in your new development, there are five key items of information that Anglian Water must be made aware of:

1. Regulation 5

Notification to Anglian Water: It is a legal requirement that Anglian Water must be notified of any proposed installation of a rainwater or greywater system.

2. The mains water back-up supply

The mains water back-up supply to any water reuse system must always be fully protected against the possible risk of backflow. Fluid category 5 backflow protection can only be achieved by the installation of either a type AA or type AB air gap, between the mains water supply and the water reuse system.

3. Wholesite backflow protection

Anglian Water insist that a **double check valve** is fitted on the rising main, at the point of entry to any property that has a reclaimed or recycled system installed.

4. Internal pipework identification

All water reuse system pipework must comply with the colour coding standards set out in BS EN 16941-1:2018 for rainwater and BS8525-2010 for greywater. These water reuse standards include clear labelling of all points of use and operational valves. Also, any outside taps must be labelled 'NOT DRINKING WATER'.

Colour coding of the pipework is essential to prevent any future **cross connection** between the drinking water supply and the water reuse system. This is not only a matter of water regulation concern but also a measure contributing to health and safety.

5. External pipework identification

The rainwater supply pipe from the below ground storage to the dwelling **must not be BLUE**. The British Standards clearly state that **it must be BLACK and GREEN**.

Important note: Please remember, if you are intending to install any water reuse systems on your development, Anglian Water must be notified. Our Water Regulations Team can be contacted either by telephone on **0345 60 66 087**, option **3**, then option **3** or by email to waterregulations@anglianwater.co.uk



Further advice and recommended methods of installation for these types of systems can be found on our website anglianwater.co.uk/developers

Occupancy of new properties

The Developer will be charged for any standing charges and water consumption until Anglian Water are informed of the new occupant's detail. Details of the occupancy of a new property can be given up to six weeks prior to the date of occupancy. When notifying Anglian Water of a new occupant the following information will be required:

- Property reference number (the list of property reference numbers is sent out with the cost advice for the service connections).
- · Occupier's name.
- · Full postal address of property.
- · Date of occupancy.
- · Occupier's previous address.
- · Meter serial number and reading.

Details can be given by: Telephone: **03457 91 91 55**





Anglian Water Services Limited

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anglianwater.co.uk Last updated 2023